

# scientific sessions 2003

Sessions: November 9-12  
Exhibits: November 9-11  
Orlando, Florida

American Heart Association  
Fighting Heart Disease and Stroke

basic science



clinical science



population science



contact us

sign in

Main Menu

Advanced Search

Browse

My Itinerary

Disclosure Legend

Search:

Search

Display As  Presentations  Sessions

Click Here for a Print-Friendly Version of this Page

Presentation 11/12/2003 4:00:00 PM

Time:

**Title:** Does Metabolife 356® Have a Negative Impact on Hemodynamics?

**Keywords:** Hemodynamics, Pharmacology, Hypertension, Nutrition

**Author** Brian F Mc Bride, Hartford Hospital, Hartford, CT; Agnes

**Block:** Krydusz, Angeliki K Karapanos, University of Connecticut School of Pharmacy, Storrs, CT; Jeffrey Kluger, C. Michael White; Hartford Hospital, Hartford, CT

**Disclosure** **B.F. Mc Bride**, None; **A. Krydusz**, None; **A.K. Karapanos**, None; **J. Kluger**, None; **C. White**, None.

**Abstract** Metabolife 356® was one of the top selling herbal product

**Body** brands in the years 2001 and 2002. It is used for appetite suppression and contains 18 ingredients including ephedra, caffeine, and siberian ginseng. However, the impact of this drug on hemodynamics has not been studied previously.

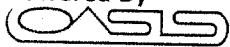
**Objective:** To determine the impact of Metabolife 356® on hemodynamics. **Methods:** Normal healthy volunteers were randomized in a crossover fashion to receive one tablet of Metabolife 356® or matching placebo. Blood pressure, systemic vascular resistance, cardiac output, heart rate, and stroke volume evaluations (BioZ monitor, San Diego, CA) were taken at baseline and 1, 3, and 5 hours post-dosing. Evaluations were performed at the same time of day to minimize circadian variation and there was a one-week washout period between study phases. **Results:** Fifteen subjects (age:  $27 \pm 3$  years, 56% male; weight:  $73 \pm 15$  kg) were included in the study. No significant differences were noted between study groups for baseline hemodynamic values. However, the changes in systolic blood pressure from baseline were 10.00, 7.85, and 15.57 mmHg higher at 1, 3, and 5 hours in the Metabolife 356® group as compared to placebo ( $p=0.0029$ ,  $p=0.0105$ ,  $p=0.0107$ , respectively). The change in diastolic blood pressures from baseline were 5.26, 6.66, and 2.37 mmHg higher at 1, 3, and 5 hours in the Metabolife 356® group as compared to placebo ( $p=0.0301$ ,  $p=0.0331$ ,  $p=0.1483$ , respectively). The changes in systemic vascular resistance from baseline were 94.41, 121.27, and 53.49 (dyne\*sec)/cm<sup>5</sup> higher at 1, 3, and 5 hours in the Metabolife 356® group as compared to placebo ( $p=0.0106$ ,  $p=0.00587$ ,  $p=0.0736$ , respectively). Cardiac output and its constituents (heart rate and stroke volume) were not changed at any time point. **Conclusion:**

Administration of a single dose of Metabolife 356® increases systolic and diastolic blood pressure primarily due to increases in systemic vascular resistance. Since this herbal supplement is recommended to be taken every 4 hours, it is possible that the changes in blood pressure are maintained throughout the day. Patients with hypertension at baseline should be cautioned against use until more information is available.

[Add to My Itinerary](#)

**American Heart Association**  
7272 Greenville Avenue  
Dallas, Texas 75231

Powered By



OASIS, The Online Abstract Submission and  
Invitation System  
© 1996 - 2003 Coe-Truman Technologies, Inc.  
All rights reserved.

Services By



Coe-Truman Technologies, Inc.